

**CLAIMS AS AMENDED HEREIN**  
**WITH STATUS IDENTIFIERS AND MARKINGS TO SHOW CHANGES**

The following claims replace all prior versions of the claims in this application:

We claim:

1   **Claim 1 (currently amended):** A method of measuring the concentration of nitric oxide in a  
2   range of 5 to 200 ppb an analyte in a gas sample of exhaled breath, said method comprising:  
3       providing a first disposable sensor, said first sensor comprising a sensing element  
4           comprising cytochrome-c in a sol-gel, wherein said sensing element undergoes a  
5           change in the presence of 5 to 200 ppb of nitric oxide said analyte;  
6       loading said first sensor into a gas analysis device;  
7       measuring the concentration of nitric oxide said analyte in an exhaled breath sample  
8           using said first disposable sensor and said gas analysis device;  
9       removing said first disposable sensor from said device; and  
10      installing a second disposable sensor into said device, said second disposable sensor  
11           likewise comprising a sensing element comprising cyrochrome-c and a sol-gel  
12           and undergoing a change in the presence of 5 to 200 ppb of nitric oxide.

1   **Claim 2 (currently amended):** The method according to claim 1, wherein said first and second  
2   disposable sensors are sensor is within a disposable housing.

1   **Claim 3 (original):** The method according to claim 1, wherein said change is a change in an  
2   optically quantifiable characteristic.

1   **Claims 4-6 (canceled)**

1   **Claim 7 (currently amended):** The method according to claim 1, further comprising wherein  
2   the step of measuring the concentration of an analyte in a gas sample using said disposable

3 ~~sensor and said gas analysis device comprise~~ employing means for ensuring that extraneous  
4 signals do not interfere with measurement of nitric oxide.

1 **Claim 8 (original):** The method according to claim 7, wherein said means for ensuring that  
2 extraneous signals do not interfere with measurement comprises two separate channels for  
3 analysis of the gas, wherein one of said channels is used for reference analysis.

1 **Claim 9 (original):** The method according to claim 7, wherein said means for ensuring that  
2 extraneous signals do not interfere with measurement comprises using two separate sensing  
3 elements for analysis of the gas, wherein one of said elements is used for reference analysis.

1 **Claim 10 (original):** The method according to claim 1, additionally comprising conditioning the  
2 gas sample before measurement.

1 **Claim 11 (original):** The method according to claim 1, wherein said first disposable sensor uses  
2 calibration information associated with said sensor.

1 **Claims 12-17 (canceled)**

2 **Claim 18 (currently amended):** A ~~disposable sensor for use with a device for quantifying that~~  
3 ~~quantifies~~ the concentration of nitric oxide in a range of 5 to 200 ppb ~~an analyte~~ in a gaseous  
4 sample of exhaled breath, ~~said device~~ comprising:

5 a disposable sensing element comprising cytochrome-c in a sol-gel and having a nitric  
6 oxide measurement range of 5 to 200 ppb; and  
7 an interface means for interfacing said disposable sensing element sensor with the  
8 remainder of said device.

1 **Claim 19 (currently amended):** The device of sensor according to claim 18, wherein said  
2 interface means comprises a means for aligning to align an optical window in said disposable  
3 sensing element sensor with an optical transducer appropriate location or locations on said  
4 device.

1   **Claim 20 (currently amended):** The device of sensor according to claim 18, wherein said  
2   disposable sensing element generates an electrical signal and said interface means comprises a  
3   means to align electrical contacts on associated with said disposable sensing element sensor with  
4   electrical contacts on the remainder of an appropriate location or locations on said device.

1   **Claim 21 (currently amended):** The sensor according to claim 18, wherein said interface  
2   means comprises a slot in said device and a guide in said disposable sensing element sensor.

1   **Claim 22 (currently amended):** A kit for determining analyzing the concentration of nitric  
2   oxide an analyte in a sample of exhaled breath in which said nitric oxide is present in an amount  
3   ranging from 5 to 200 ppb, said kit comprising:

4         a plurality of disposable sensors, wherein said sensors comprise cytochrome-c in a sol-gel  
5         having a nitric oxide response range of 5 to 200 ppb include a disposable sensing  
6         element responsive to said analyte;  
7         a gas analysis device for use with said sensors, said device comprising means for  
8         receiving exhaled breath and converting said response to a measurable signal  
9         measuring the concentration of said analyte in said exhaled breath.

1   **Claims 23-27 (canceled)**

1   **Claim 28 (withdrawn):** A sensor for use with a device that quantifies the concentration of an  
2   analyte in a gaseous sample of exhaled breath, comprising:

3         a sensing element; and  
4         a use limitation means.

1   **Claim 29 (withdrawn):** The sensor according to claim 28, wherein said use limitations means  
2   comprises a means for preventing or discouraging use of the sensor after it has been used a  
3   certain number of times.

1   **Claim 30 (withdrawn):** The sensor according to claim 29, wherein said certain number of times  
2   is thirty.

- 1   **Claim 31 (withdrawn):** The sensor according to claim 29, wherein said certain number of times
- 2   is one.
  
- 1   **Claim 32 (withdrawn):** The sensor according to claim 28, wherein said use limitations means
- 2   comprises a means for preventing or discouraging use of the sensor after an expiration date.
  
- 1   **Claim 33 (withdrawn):** The sensor according to claim 28 or 32, wherein said use limitations
- 2   means comprises an information storage device.
  
- 1   **Claim 34 (withdrawn):** The sensor according to claim 33, wherein said information storage
- 2   device comprises an integrated circuit.
  
- 1   **Claim 35 (withdrawn):** The sensor according to claim 33, wherein said information storage
- 2   device comprises a magnetic strip.
  
- 1   **Claim 36 (withdrawn):** The sensor according to claim 28, wherein said use limitation means
- 2   comprises a means for preventing or discouraging use of the sensor after it has once been
- 3   removed from a gas analysis device.
  
- 1   **Claim 37 (withdrawn):** The sensor according to claim 36, wherein said use limitations means
- 2   comprises a tab.
  
- 1   **Claim 38 (withdrawn):** The sensor according to claim 36, wherein said use limitations means
- 2   comprises a fuse.
  
- 1   **Claim 39 (withdrawn):** The sensor according to claim 36, wherein said use limitations means
- 2   comprises a means for detecting a leak within said sensor.
  
- 1   **Claim 40 (withdrawn):** A disposable sensor for quantifying the concentration of an analyte in a
- 2   gaseous sample of exhaled breath, comprising:
  - 3       a housing;
  - 4       a disposable sensing element within said housing; and

5           a port in said housing for entry of said gaseous sample of exhaled breath; and  
6           means for sealing said port until it is time for the sensor to receive the gas sample of  
7           exhaled breath.

1   **Claim 41 (withdrawn):** The sensor according to claim 40, wherein said means for sealing said  
2   port is a puncturable cover.

1   **Claim 42 (withdrawn):** The sensor according to claim 40, additionally comprising:  
2        a second port in said housing for exit of said gaseous sample of exhaled breath; and  
3        means for sealing said second port until it is time for the sensor to receive a gas sample of  
4        exhaled breath.

1   **Claim 43 (withdrawn):** The sensor according to claim 42, wherein said means for sealing said  
2   second port is a second puncturable cover.

1   **Claim 44 (canceled)**

1   **Claim 45 (currently amended):** The device of sensor according to claim 18 44, further  
2   comprising wherein said means for means for accounting for the effect of interfering signals  
3   comprises two gas cells, one containing said disposable sensing element and the other containing  
4   a second said sensing element and means for selectively removing said nitric oxide from  
5   exposure to said second sensing element within said housing.

1   **Claim 46 (canceled)**

1   **Claim 47 (withdrawn):** A sensor for use with a device that quantifies the concentration of an  
2   analyte in a gaseous sample of exhaled breath, comprising:  
3        a housing;  
4        a disposable sensing element within said housing; and  
5        a first sample conditioning unit within said housing.

1   **Claim 48 (withdrawn):** The sensor according to claim 47, wherein said sample conditioning  
2   unit comprises zeolite (5A or 13x), a silica gel, or another desiccant.

1   **Claim 49 (withdrawn):** The sensor according to claim 47, wherein said sample conditioning  
2   comprises potassium permanganate combined with charcoal or zeolite 3A.

1   **Claim 50 (withdrawn):** The sensor according to claim 47, additionally comprising a second  
2   sample conditioning unit, wherein said first sample conditioning unit is for use in measuring a  
3   first analyte, and said second sample conditioning unit is for use in measuring a second analyte.

1   **Claim 51 (withdrawn):** A sensor for use with a device that quantifies the concentration of an  
2   analyte in a gaseous sample of exhaled breath, comprising:

3         a housing;  
4         a disposable sensing element within said housing; and  
5         a means for limiting the rate of diffusion of said sample.

1   **Claim 52 (withdrawn):** The sensor according to claim 51, wherein said means for limiting the  
2   rate of diffusion comprises a diffusion port.

1   **Claim 53 (withdrawn):** A disposable sensor for use with a device that quantifies the  
2   concentration of an analyte in a gaseous sample of exhaled breath, comprising:

3         a disposable sensing element; and  
4         calibration information associated with said sensing element.

1   **Claim 54 (withdrawn):** The sensor according to claim 53, wherein said calibration information  
2   comprises text for reading by a user.

1   **Claim 55 (withdrawn):** The sensor according to claim 54, wherein said text comprises a code.

1   **Claim 56 (withdrawn):** The sensor according to claim 54, wherein said text comprises a  
2   coefficient table.

1   **Claim 57 (withdrawn):** The disposable sensor according to claim 53, wherein said calibration  
2   information is stored in an integrated circuit associated with said sensing element.

1   **Claim 58 (withdrawn):** The disposable sensor according to claim 53, wherein said calibration  
2   information is stored in a bar code associated with said sensing element.

1   **Claim 59 (withdrawn):** The disposable sensor according to claim 53, wherein said calibration  
2   information is stored in an optical code associated with said sensing element.

1   **Claim 60 (withdrawn):** A package of disposable sensors, comprising:  
2         a plurality of disposable sensors for use in analyzing exhaled breath; and  
3         a storage compound placed near said sensors.

1   **Claim 61 (withdrawn):** The package according to claim 60, wherein said storage compound  
2   comprises a desiccant.

1   **Claim 62 (withdrawn):** The package according to claim 60, wherein said storage compound  
2   comprises a salt solution.

1   **Claim 63 (canceled)**

1   **Claim 64 (withdrawn):** A sensor for use with a device that quantifies the concentration of an  
2   analyte in a gaseous sample of exhaled breath, comprising:  
3         a housing with a transparent window;  
4         a disposable sensing element within said housing; and  
5         means for protecting said window from smudges or other optical interferences.

1   **Claim 65 (withdrawn):** The sensor according to claim 64, wherein said means for protecting  
2   said window comprises placing said window in a recess in said housing.

1   **Claim 66 (withdrawn):** The sensor according to claim 64, wherein said means for protecting  
2   said window comprises a protective covering over said window.